

Catalogue of American Amphibians and Reptiles.

Trauth, S.E. and C.T. McAllister. 1996. *Cnemidophorus sexlineatus*.

Cnemidophorus sexlineatus* (Linnaeus)*Six-lined Racerunner**

Lacerta sexlineata Linnaeus, 1766:364. Type-locality, "Carolina", restricted to Charleston, Charleston County, South Carolina, by Smith and Taylor (1950b). Holotype lost (see Maslin and Secoy, 1986), collected by A. Garden, date of collection unknown.

Lacerta 6-lineata: Müller, 1774:94. Emendation.

Lacerta sex-lineata: Bonnaterre, 1789:48. Emendation.

Seps sexlineata: Cuvier, 1817 (1816):29.

Teius lemniscatus: Merrem, 1820:60 (part).

Lacerta fallax Merrem, 1820:63. Type-locality, "Carolina." No type-specimens are known to exist. Collector and date of collection unknown.

Am.[eiva] sex-lineata: M'Murtrie, in Cuvier, 1831:22.

Ameiva sexlineata: M'Murtrie, in Cuvier, 1831:23. Emendation.

Lacertam sexlineatam: Wiegmann, 1834:27.

Cnemidophorus sexlineatus: Duméril and Bibron, 1839:131. First use of combination.

Aspidoscelis sexlineatus: Fitzinger, 1843:20.

Cnemidophorus sex-lineatus: Baird, 1859:38. Emendation.

Cnemidophorus sexlineatus var. *gularis*: Cope, 1866 (1867):303 (part).

Cnemidophorus sexlineatus: Cope, 1893 (1894):387. *Lapsus*.

Cnemidophorus sexlineatus sexlineatus: Cope, 1898 (1900):598.

Cnemidophorus sexlineatus: McLain, 1899:2. *Lapsus*.

Cnemidophorus sexlineatus: Tofahr, 1902:201. Emendation.

Cnemidophorus sexlineatus sexlineatus: Brown, 1903:546. *Lapsus*.

• **Content.** Three subspecies are recognized: *sexlineatus*, *stephensae*, and *viridis*.

• **Definition.** *Cnemidophorus sexlineatus* is a medium-sized lizard of the *sexlineatus* species group, with adult SVL 66-90

mm (Trauth, 1980). Adult tail length ranges 146-190 mm. Maximum head length of 18.6 mm occurs in males. Scallation is as follows: granules around midbody (GAB) number 62-115, femoral pores 20-42, enlarged subdigital lamellae of the fourth pes 20-39, granules between the paravertebral stripes at midbody (PVG) 3-24, lateral supraocular granules (LSG) 5-62, circumorbital granules (COG) 1-29, granules from occiput to rump (GOR) 155-267, granules encompassing the vertebral stripe 0-15, and the PVG/GAB (x 100) 9.9-26.7. The postantibrachial scales usually are small but can be enlarged (but not greatly enlarged as in *C. gularis*). Supraocular scales number 4, parietals 3, and frontoparietals 2; the number of scales in the latter two groups may be increased by subdivision, especially in Atlantic Coast populations from Maryland to Florida.

Dorsal adult coloration shows considerable geographic variation. The dorsolateral fields can be dark brown or black with an anterior greenish suffusion on the lateral body surfaces up to and including the dorsolateral stripe (Fig. 1), or the entire trunk may be green. The face and neck may be blue, bluish-green, or yellow. Dorsal longitudinal stripes usually are white or yellow, and may number 6-8 (Fig. 2). Adult males are light blue to bluish green ventrally, whereas adult females vary from a salmon pink to pearly white (or hues of blue). Tail coloration is blue in hatchlings, fading to brown or slate in adults. Juveniles of *sexlineatus* and *viridis* exhibit white stripes upon dark fields, and the venter is white in all subspecies. Juveniles of *stephensae* are yellow on the head and neck.

• **Descriptions.** Trauth (1980) provided the most recent detailed description of this species and included information on geographic variation in scutellation, color, and striping pattern throughout its range (see Comment). Additional descriptions can be found in Burt (1931a), Cope (1898 [1900]), Duellman and Zweifel (1962), Smith (1946), Smith and List (1955), Walker et al. (1990a, b), and Wright (1967). Bickham et al. (1976) and Lowe et al. (1970) described the karyotype (2N = 46, with 2 large metacentric macrochromosomes, 24 medium-sized telocentric and subtelocentric macrochromosomes, and 20 microchromosomes).

• **Illustrations.** Black and white photographs of the various subspecies are numerous and include the following: *sexlineatus*

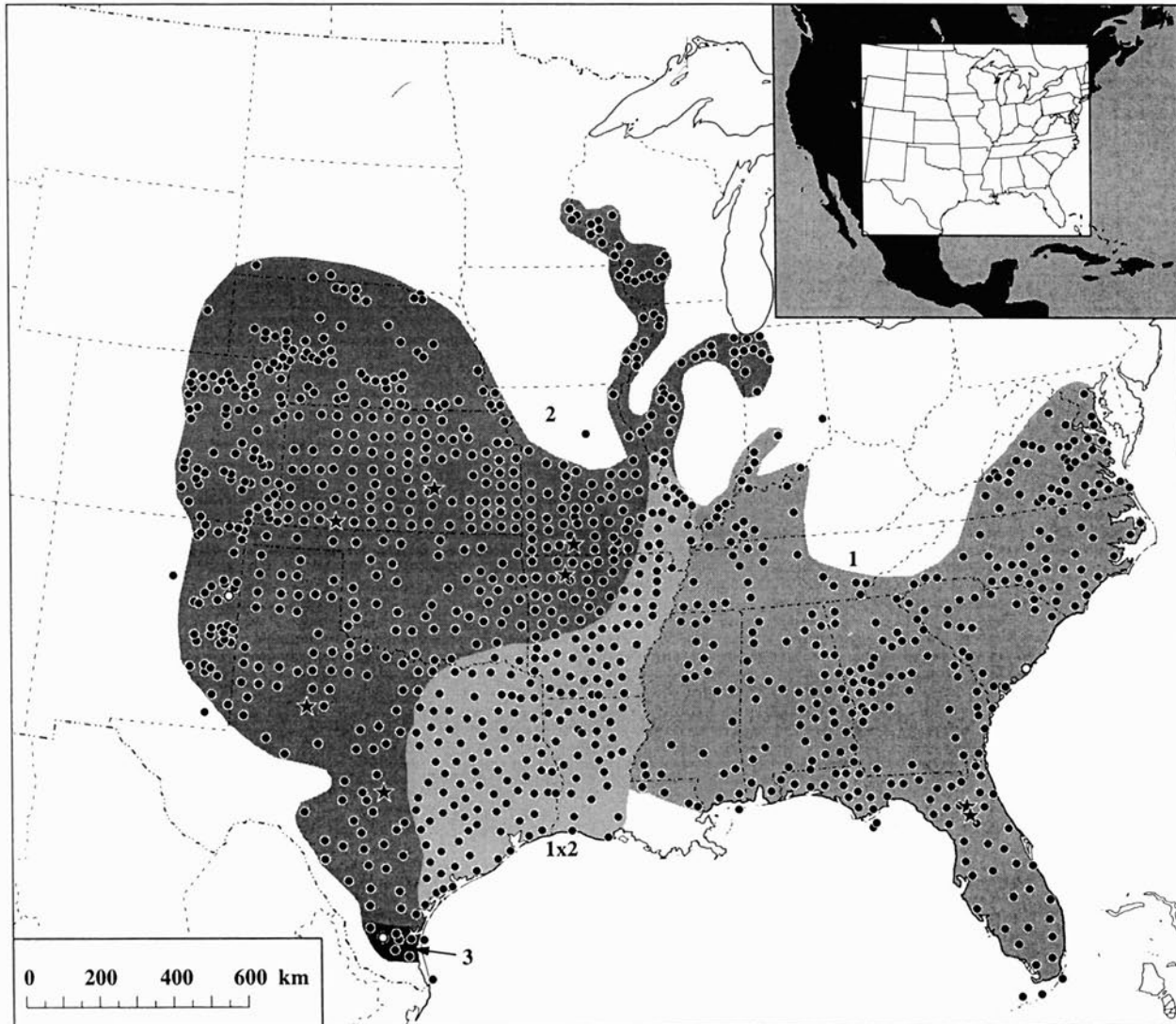


Figure 1. Adult male *Cnemidophorus sexlineatus viridis* (76 mm in SVL) from IZARD Co., Arkansas. Photograph by S. E. Trauth.

(Barbour, 1971; Cochran and Goin, 1970; Minton, 1972; Mount, 1975; Sellers et al., 1980; Smith, 1946; Trauth, 1980; Wright, 1994); *stephensae* (Trauth, 1992); *viridis* (Anderson, 1965; Baxter and Stone, 1985; Collins, 1993; Collins and Collins, 1991; Fitch, 1958; Hardy, 1962; Lowe, 1966; Lowe et al., 1966; Pough et al., 1989; Smith, 1946; Smith, 1961; Trauth, 1980; Walker et al., 1990a, b). Color photographs of *sexlineatus* were provided by Ashton and Ashton (1991), Behler and King (1979), Leviton (1972), Martof et al. (1980), Palmer and Braswell (1995), and Snyder (1972), and of *viridis* by Busby et al. (1996), Collins and Collins (1993), Conant and Collins (1991), Degenhardt et al. (1996), Garrett and Barker (1987), Hammerson (1982), Johnson (1987), Oldfield and Moriarty (1994), Vermersch (1992), and Vogt (1981). Color illustrations of *sexlineatus* are in Conant (1975), Dundee and Rossman (1989), Mitchell (1994), and Smith and Brodie (1982), and of *viridis* in Stebbins (1985). Line drawings of scutellation and postantibrachial scales was illustrated by Trauth (1980). Photographs of a nest and eggs are found in Brown (1956). Böhme (1988) illustrated the hemipenes. Newton and Trauth (1992) provided electron micrographs of spermatozoa. The karyotype was illustrated by Bickham et al. (1976) and Lowe

et al. (1970), and that of a triploid laboratory hybrid (*C. neomexicanus* × *C. sexlineatus*) by Dessauer and Cole (1984). Trauth (1988) provided electron micrographs of the eggtooth. Light and electron micrographs of the eggshell are found in Trauth and Fagerberg (1984). Photomicrographs of histological sections of the testes and adrenal glands are found in Brackin (1979). Electrophoretic patterns are available in Dessauer and Cole (1984, 1989) and Wright et al. (1983). Photographs of winter burrows are found in Trauth (1983).

• **Distribution.** *Cnemidophorus sexlineatus* ranges from Maryland to the Florida Keys in the eastern United States, from the upper Mississippi River region (southeastern Minnesota and adjacent Wisconsin) in the north to extreme southern Texas in the south, and from southern South Dakota and southeastern Wyoming through eastern Colorado to eastern New Mexico in the west. The eastern race (*sexlineatus*) occurs in the eastern United States, east of the Mississippi River and south of the Ohio River at their confluence. The western race (*viridis*) occurs in Illinois, northern and southern Indiana, and Wisconsin as well as areas west of the Mississippi River. A broad zone of intergradation exists between *sexlineatus* and *viridis* in the south-central United States (see Map). Burt (1931a), Conant (1958,



Map. Distribution of *Cnemidophorus sexlineatus*. Large circles indicate type-localities; dots mark counties of occurrence or specific localities at the edge of the range. Stars indicate fossil records.

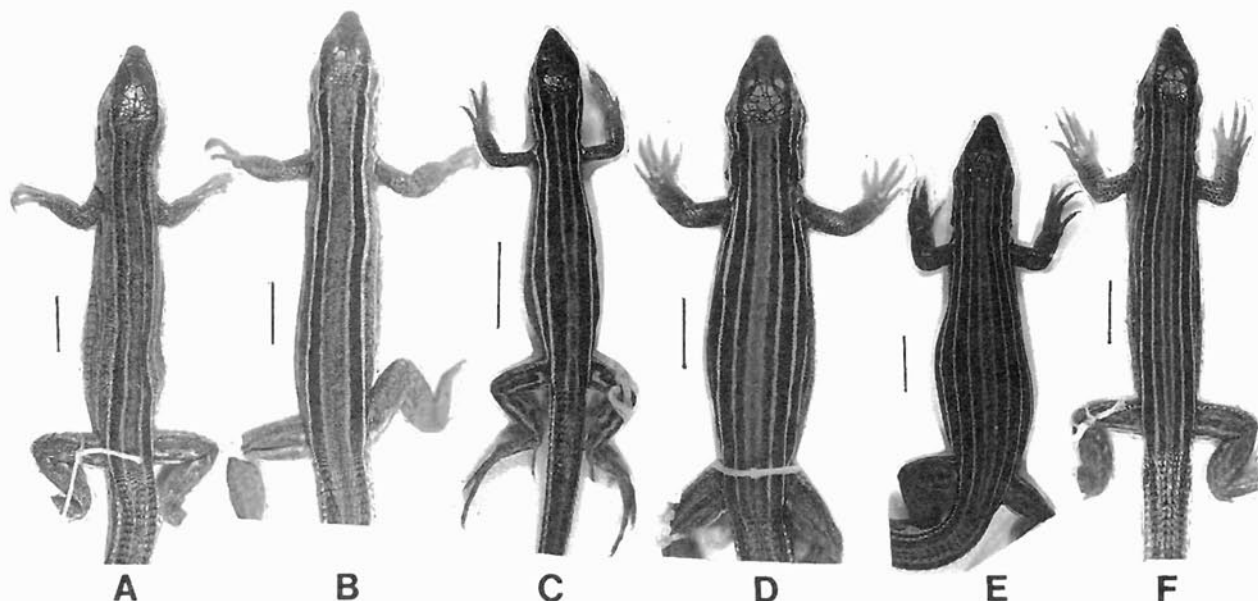


Figure 2. Dorsal pattern in *Cnemidophorus sexlineatus*. *C. s. viridis*: A - (male, Bourbon Co., Kansas); B - (male, Baxter Co., Arkansas). *C. s. stephensae*: C - (male, Kenedy Co., Texas). *C. s. sexlineatus*: D - (male, Wake Co., North Carolina); E - (female, Lancaster Co., South Carolina). *C. s. sexlineatus* × *viridis*: F - (male, Cameron Parish, Louisiana). Line = 10 mm. Photographs from Trauth (1980).

1975), Conant and Collins (1991), Smith (1946), Trauth (1980), Vance (1978), and Wright (1994) summarized the distribution in the United States.

Cnemidophorus sexlineatus inhabits areas with dry, friable soils comprised mostly of sand, sandy-loam or red clay substrates in which they seek shelter via burrowing; these habitats include sandy areas along and within river floodplains, sand dunes, cedar glades, and rock outcrops. Racerunners are also common in a variety of physically or floristically-altered environments such as along highway and railroad right-of-ways, beneath power lines, the borders of cultivated fields or pastures, and open canopy areas within pine and oak-hickory forests.

• **Fossil Record.** *Cnemidophorus sexlineatus* has been reported from the Pleistocene of Arkansas (Davis, 1973), Florida (Auffenberg, 1956; Gut and Ray, 1963; Martin, 1974), Kansas (Etheridge, 1958, 1960; Holman, 1971, 1979; Rickart, 1976), Texas (Holman, 1966, 1969; Rogers, 1976), and Missouri (Holman, 1974).

• **Pertinent Literature.** Comprehensive works on the biology of *Cnemidophorus sexlineatus* include Burt (1931a), Fitch (1958), and Trauth (1980). Taxonomic and systematic discussions are found in Burt (1931a), Cope (1892), Duellman and Zweifel (1962), Gadow (1903), Trauth (1980), and Wright

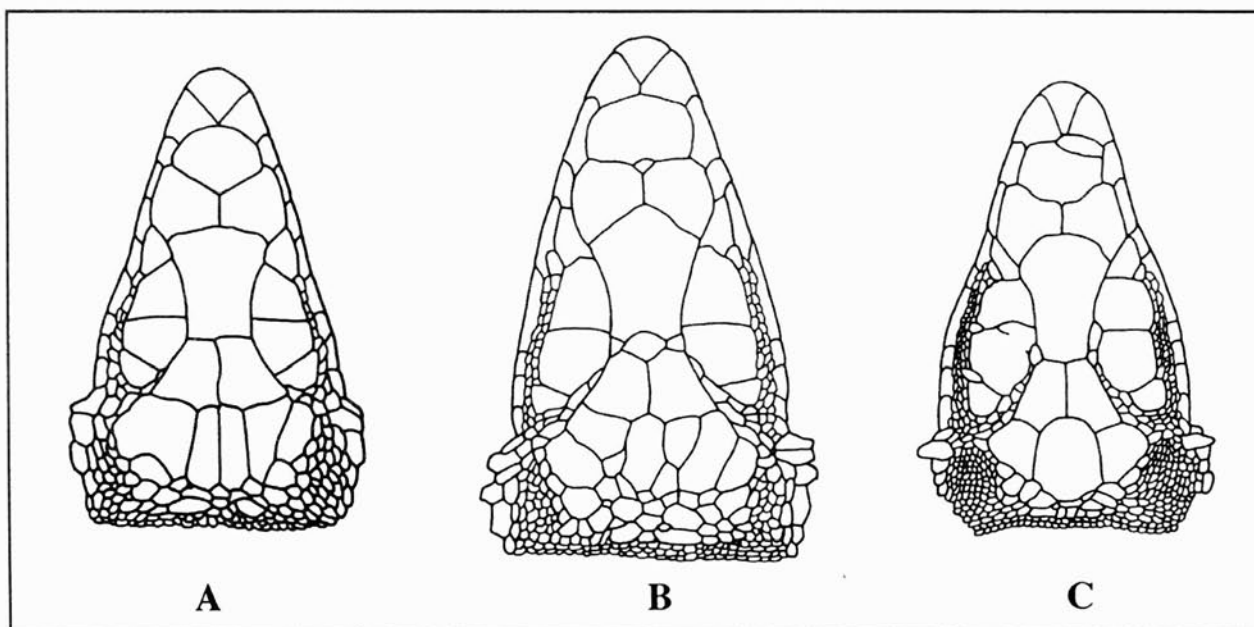


Figure 3. Dorsal head scutellation of *Cnemidophorus sexlineatus*. A. *C. s. viridis* (USD 3581), Knox Co., Nebraska. B. *C. s. sexlineatus* (USNM 22178), St. Mary's Co., Maryland. C. *C. s. sexlineatus* (AMNH 64548), Highlands Co., Florida.

(1993). Chromosomes were examined by Bickham et al. (1976), Cole (1984), Dessauer and Cole (1984), Lowe and Wright (1966), and Lowe et al. (1970). Electrophoretic patterns and biochemical genetics are discussed in Dessauer and Cole (1984, 1989), Dessauer et al. (1962), Guttman (1971), McKinney et al. (1973), Neaves (1969), Parker and Selander (1976), and Wright et al. (1983). Mitochondrial DNA analyses are detailed in the works of Densmore et al. (1989a, b) and Moritz et al. (1992). Parker (1979) provided detailed morphometric analyses within a phylogenetic framework.

Ecological relationships with unisexual congeners were examined by Bickham et al. (1976), Cole et al. (1988), McKinney et al. (1973), Paulissen et al. (1992), Taylor et al. (1989), Walker (1987), and Walker et al. (1990a, b, 1994). Specific habitat affinities are documented in Anderson et al. (1952), Dodd (1992a), Fouquette and Lindsay (1955), Mushinsky (1985), and Rudolph and Dickson (1990). Discussion of interspecific competition can be found in Bohlen (1976) and Werth (1972). Life history parameters are discussed by Ballinger and Jones (1985), Ballinger et al. (1990), Bellis (1964), Carpenter (1959), Clark (1976), Fitch (1958), Hardy (1962), Mushinsky (1985), Paulissen (1988c), Walker (1964), and Werth (1969, 1972). Relationships among life-history attributes including growth pattern, survival rate, and age of maturity are reported in Shine and Charnov (1992). The effects of habitat alteration are mentioned in Means and Campbell (1981). Symbiotic relationships are discussed by Lips (1991), Pearson and Nelson (1952), and Witz et al. (1991). Predation by the red imported fire ant was discussed in Mount et al. (1981), whereas other instances of predation were discussed in Camper (1986) and Whiting et al. (1991). Field marking techniques include the use of bird bands (Paulissen, 1986) and fluorescent dyes (Dodd, 1992b). Durtsche (1996) presented a novel capture technique. Aquatic habits were documented by Dillon and Baldauf (1945), Stille (1947), and Trauth et al. (1996). Arboreality was observed by Paulissen and Harvey (1985). Dietary preferences, feeding activity, feeding behavior, and nutrition are detailed in Burt (1928), Dearing (1993), Hamilton and Pollack (1961), Harney (1953), McCauley (1939), Paulissen (1987a, b), Pough (1973), Pritchett (1903), Punzo (1990), and Witz and Lawrence (1993). Whole-body protein content was reported by Boyd and Goodyear (1971). Cannibalism was reported in Etheridge and Wit (1982). Hatch and Stein (1994) reported that adults will eat eggs laid in captivity. Ballinger et al. (1992) discussed chemosensory searching. Hibernation, hibernation denning sites, and overwintering of eggs are described in Etheridge et al. (1983, 1986), Sellers et al. (1982), Smith et al. (1965), Trauth (1974, 1977, 1983), Trauth and Mount (1978), and Wit and Sellers (1993). Data on eggs, nests, and nesting habitat are presented in Ballinger and Clark (1973), Brown (1956), Carpenter (1960a), Mount et al. (1981), Mullen et al. (1984), and Trauth (1977, 1983). The female reproductive cycle and clutch characteristics are reported in Carpenter (1960a), Clark (1976), Etheridge et al. (1986), Fitch (1970, 1985), Hoddenbach (1966), and Trauth (1983). The male reproductive cycle was examined in Brackin (1979), Etheridge et al. (1986), and Johnson and Jacob (1984). Clark et al. (1995) examined contamination by pesticides. Witz (1996) presented a collecting technique.

Mating behavior is presented in Noble and Bradley (1933). Social behavior and activity patterns were discussed by Ayres (1973), Barden (1942), Brackin (1978), Carpenter (1960b, 1962), Etheridge and Wit (1993), Hardy (1962), Leuck (1980, 1982, 1985), and Paulissen (1988a). Gove (1979) discussed tongue-flicking behavior.

Requirements regarding ultraviolet light are presented in Townsend and Cole (1985). Brackin (1979) and Grassman and Hess (1992a, b) addressed adrenal gland activity. Sellers et al.

(1980) discussed methods of blood collection. Body temperature relationships were presented by Brattstrom (1965), Edgren (1955), Fitch (1956), McKenna and Packard (1975), Paulissen (1988b), and Ragland et al. (1981). Discussion of locomotion, including running speed, sprint performance, and energetics, can be found in Ballinger et al. (1979), Dodd (1993), and White and Anderson (1994), respectively. Pituitary activity is documented in Johnson and Jacob (1984). Guillette et al. (1991) induced oviposition with the use of prostaglandins.

Ectoparasites were studied by Farner and Seaman (1946), Loomis (1956), and Loomis and Crossley (1963), whereas descriptions of endoparasites can be found in the studies of Brooks and Mayes (1976), Dollahon and Janovy (1971), Dyer (1971), Harwood (1932), Hughes et al. (1941), McAllister et al. (1991a, b), Moskowitz (1951), Shoop and Janovy (1978), and Zimmerman and Brown (1952).

Morphology has been studied as follows: adrenal gland and testicular histology (Brackin, 1979), mesonephros-adrenal association (Hardy and Cole, 1981), eggshell (Trauth and Fagerberg, 1984, 1993), eggtooth (Trauth, 1988), oral anatomy and teeth (Presch, 1974; Taylor, 1940), spermatozoan ultrastructure (Newton and Trauth, 1992; Trauth and Buchanan, 1996), circumtesticular tunic (Lowe and Goldberg, 1966), thyroid gland (Lynn et al., 1966), and ultimobranchial bodies (Sehe, 1965). Sex identification using scutellation was presented by Pietruszka (1981). Sexual dimorphism was examined by Trauth (1980) and Fitch (1981). Maslin (1967) described skin grafting techniques.

Annotated bibliographies which contained *Cnemidophorus sexlineatus* include Carpenter and Krupa (1989), Dixon (1993), Enge and Dodd (1986), Lohoefer and Altig (1983), Price (1983), and Vance (1985). Regional summaries occur for the following states: Alabama (Mount, 1975), Colorado (Hammerson, 1982), Florida (Ashton and Ashton, 1991), Illinois (Smith, 1961), Indiana (Minton, 1972), Kansas (Collins, 1974, 1982, 1993), Kentucky (Barbour, 1971), Louisiana (Dundee and Rossman, 1989), Minnesota (Oldfield and Moriarty, 1994), Missouri (Anderson, 1965; Johnson, 1987), Nebraska (Lynch, 1985), New Mexico (Degenhardt et al., 1996), North Carolina (Palmer and Braswell, 1995), Oklahoma (Webb, 1970), Tennessee (Snyder, 1972); Texas (Dixon, 1987), Virginia (Mitchell, 1994; Tobey, 1985), Wisconsin (Vogt, 1981), and Wyoming (Baxter and Stone, 1985). Additional noteworthy distributional or ecological information is available in Burt (1935) and Minton and Minton (1948), and for the following states: Alabama (Jackson and Jackson, 1970 [1971]), Arkansas (Dellinger and Black, 1938; Dowling, 1957; Schwardt, 1938; Taylor, 1935), Florida (Blaney, 1971; Franz, 1995; Funderburg and Lee, 1968; Greenberg et al., 1994; Lee, 1968), Georgia (Martof, 1963), Illinois (Cagle, 1942; Munyer and Parmalee, 1967), Kansas (Burt, 1927; Busby and Parmelee, 1996; Clarke, 1958, 1965; Collins and Collins, 1991), Missouri (Hurter, 1893), Nebraska (Hudson, 1972), New Mexico (Lowe, 1955), North Carolina (Engels, 1942, 1952; Lewis, 1946), Oklahoma (Ortenburger and Freeman, 1930), Tennessee (Savage, 1967), Texas (Strecker, 1902, 1909, 1922, 1929; Strecker and Williams, 1928; Vermersch, 1992), Tennessee (Blanchard, 1922), and Virginia (Richmond and Goin, 1938).

• **Nomenclatural History.** As with many other members of "Cope's most difficult genus" (Lowe, 1993), the taxonomic history of *Cnemidophorus sexlineatus* is replete with misapplied names. The early synonyms were generated prior to the general acceptance of Darwin's work placing biological species within a phylogenetic framework, and largely resulted from differing interpretations of systematic classification at levels above the species category. *Cnemidophorus sexlineatus* became taxonomically intertwined with *C. gularis* and *C. perplexus* following

the description of the latter two taxa by Baird and Girard in 1852. Cope (1866 [1867]) considered *gularis* and *sexlineatus* to be conspecific, an arrangement followed by most other workers (e.g., Bocourt, 1874; Boulenger, 1885; Cope, 1875, 1883, 1898 [1900]; Coues, 1875; Günther, 1885; Strecker, 1902, 1909, 1922; Yarrow, 1875, 1882 [1883]; but not Cope, 1892) for almost a century. Cope (1892, 1898 [1900]) considered *perplexus* a subspecies of *tessellatus* (= *tigris* Burger, 1950), but Brown (1903) and Smith and Taylor (1950a) suggested a close relationship between *sexlineatus* and *perplexus*. Burt (1931a, b) recognized distinct character differences between *sexlineatus* and *gularis*, but remained unconvinced of the distinctness of the two taxa and stated that both *sexlineatus* and *perplexus* possessed close affinities with *gularis*. He codified this view by treating the three as subspecies of *C. sexlineatus* in his classic treatise on the genus *Cnemidophorus*. Although some workers (e.g., Gadow, 1906; Strecker, 1930) recognized the fact, it remained for Taylor (1936) to explicitly make clear the distinction between *sexlineatus* and *gularis*. Schmidt and Smith (1944) recognized that *gularis* was distinct from *perplexus*, and Wright (1969) has detailed the confusing misapplications of the latter name. Only with the advent of sophisticated univariate and multivariate statistical analyses of character variation in large numbers of specimens from throughout the ranges of various taxa and the application of molecular genetic techniques to systematic problems in the genus *Cnemidophorus* have the taxonomic relationships between *gularis*, *perplexus*, and *sexlineatus* been solidly established.

• **Etymology.** The name *sexlineatus* (L. “sex” = six or six-fold; L., “lineatus” = streaked or marked with lines) refers to the number of longitudinal stripes running the length of the body. The name *viridis* (L. “viridis” = green) alludes to the characteristic body color of this subspecies. The matronym *stephensae* honors Hazel J. Stephens Hickey for her financial support toward the herpetological endeavors of the senior author.

• **Comment.** Trauth (1980) noted the distinctiveness of populations of *C. sexlineatus* in Florida and Texas, and recently (Trauth, 1992) designated a new race from Texas (see below). The diagnostic traits for the new Texas race were not applicable to the undescribed Florida race. This latter form possesses extremely high scale counts for several characters (e.g., Figure 3C) and is generally restricted to central peninsular Florida and several coastal scrub habitats. Zones of intergradation between the new forms and the other races remain to be established. Trauth (1980) postulated that Florida was the evolutionary center (storehouse of genetic variation) for the species because of the range of variation of several character states in Florida.

1. *Cnemidophorus sexlineatus sexlineatus* (Linnaeus) Six-lined Racerunner

Lacerta sexlineata Linnaeus, 1766:364. See species synonymy. *Cnemidophorus sexlineatus*: Duméril and Bibron, 1839:131. See species account.

Cnemidophorus sexlineatus oligoporus: Hoffman, 1957a:153. *Cnemidophorus s.[exlineatus] sexlineatus*: Hoffman, 1957a:154.

First use of trinomial.

Cnemidophorus sexlineatus pauciporus: Hoffman, 1957b:423.

• **Definition.** This subspecies is characterized by six well-defined longitudinal light stripes. An additional vertebral stripe may be present, and it may be single, thinly-divided, or separated into two or more weakly-defined stripes. The latter condition results from expansion and separation of the vertebral stripe and occurs mostly in southeastern populations. The ver-

tebral stripe is broad in *sexlineatus* × *viridis* intergrades. The ground color is dark brown or black. The face and neck are blue. Lateral supraocular granules average 28 (12-62), circumorbital granules average 11 (4-29), and granules from occiput to rump average 218 (182-267).

• **Remarks.** Hoffman (1944, 1949) reported on the phenotypic variation in *sexlineatus* in the eastern United States and noted subdivision of parietal scales; later, Hoffman (1957a, b) named a new subspecies, *pauciporus* (= *oligoporus*), characterized by high parietal counts and reduced femoral pore number (mostly less than 30). The range of *pauciporus* was given as Maryland, Virginia, North Carolina, and northern South Carolina. Duellman and Zweifel (1962) noted that scales other than the parietals (e.g. frontoparietals and supraoculars) are often subdivided in *sexlineatus* and, by showing that femoral pore counts in *sexlineatus* elsewhere in its range were below 30, refuted the recognition of *pauciporus*. Trauth (1980) showed that supernumerary frontoparietals occurred in Alabama, Georgia, and Florida populations.

2. *Cnemidophorus sexlineatus viridis* Lowe Prairie Racerunner

Cnemidophorus sexlineatus viridis Lowe, 1966:44. Type-locality, “7.6 mi. S Tucumcari, along state rd 18, Quay County, New Mexico.” Holotype, University of Arizona, Department of Zoology (UAZ) 14800, an adult female, collected by C.H. Lowe on 13 August 1949 (not examined by authors).

• **Definition.** This subspecies possesses six well-defined longitudinal stripes and an additional vertebral stripe that is single or narrowly divided. The vertebral stripe is broad in *sexlineatus* × *viridis* intergrades. The ground color is mostly green. The face and neck are bluish-green. Lateral supraocular granules average 21 (5-36), circumorbital granules average 9 (1-12), and granules from occiput to rump average 192 (155-240).

• **Remarks.** Trauth (1980) examined geographic variation in morphological characters of *C. sexlineatus* from throughout its range. He found that this subspecies exhibits a broad contact zone with that of the eastern form (see Map). Intergrade populations possess an array of intermediate meristic counts as well as body coloration and striping patterns. Trauth (1980) also noted that 15 of 18 characters examined varied clinally. Clines were usually oriented in a northwest to southeasterly direction with meristic counts concordant from smaller to larger, respectively.

3. *Cnemidophorus sexlineatus stephensae* Trauth Texas Yellow-faced Racerunner

Cnemidophorus sexlineatus stephensi Trauth 1992:438. Type-locality, “4.8 km S Hebbronville, Jim Hogg Co., Texas.” Holotype, National Museum of Natural History (USNM) 278270, an adult male, collected by S.E. Trauth on 18 May 1983 (examined by authors).

Cnemidophorus sexlineatus stephensae: Trauth, 1995:68. Emendation.

• **Description.** This subspecies is characterized by the following combination of features: small adult body size (maximum SVL 68 mm), absence of a vertebral stripe (a vestige may be present in the region of the nape or on the anterior vertebral field in some specimens), and yellow coloration on the face and lateral surfaces of the neck in both adults and juveniles.

• **Remarks.** The range of this subspecies as illustrated by Trauth (1992) is generally restricted to the South Texas Plains, a mostly mesquite-live oak savanna characterized by moderately tall, white-to-brown colored sand dunes in the eastern portion to a region of low red-clay sand dunes in the western portion (Mahler, 1981). Trauth (1992) also found this subspecies on South Padre Island.

Literature Cited

- Anderson, P. 1965. The Reptiles of Missouri. Univ. Missouri Press, Columbia.
- Anderson, P.K., E.A. Liner, and R.E. Etheridge. 1952. Notes on amphibian and reptile populations in a Louisiana pineland area. *Ecology* 33:274-278.
- Ashton, R.E., Jr. and P.S. Ashton. 1991. Handbook of Reptiles and Amphibians of Florida. Part Two. Lizards, Turtles and Crocodylians. Rev. 2nd ed. Windward Publ., Inc., Miami, Florida.
- Auffenberg, W. 1956. Additional records of Pleistocene lizards from Florida. *Quart. J. Florida Acad. Sci.* 19:157-167.
- Ayres, D.E. 1973. Field behavior of the Six-lined Racerunner in Peoria County. *Proc. Peoria Acad. Sci.* 6:23-30.
- Baird, S.F. 1859. Reptiles, p. 17-20. *In* Zoological portion of the reports, by Lieutenant E.G. Beckwith, Third Artillery, upon the route near the thirty-eighth and thirty-ninth parallels, surveyed by Captain J.W. Gunnison, and upon the route near the forty-first parallel, surveyed by himself. *In* Reports of Explorations and Surveys, to ascertain the most practicable and economical route for a railroad from the Mississippi River to the Pacific Ocean. Vol. X. 33d Congress, 2d Sess., House of Rep. Exec. Doc. (91).
- and C. Girard. 1852. Characteristics of some new reptiles in the Museum of the Smithsonian Institution. 2nd part. *Proc. Acad. Nat. Sci. Philadelphia* 6:125-129.
- Ballinger, R.E. and D.R. Clark, Jr. 1973. Energy content of lizard eggs and the measurement of reproductive effort. *J. Herpetol.* 7:129-132.
- , N.R. Coady, J.M. Prokop, and J.A. Lemos-Espinal. 1992. Strike-induced chemosensory searching: variation among lizards. *Trans. Nebraska Acad. Sci.* 19:43-47.
- and S.M. Jones. 1985. Ecological disturbance in a sandhills prairie: impact and importance to the lizard community on Arapaho Prairie in western Nebraska. *Prairie Nat.* 17:91-100.
- , —, and J.W. Nietfeldt. 1990. Patterns of resource use in a lizard community in the Nebraska sandhills prairie. *Prairie Nat.* 22:75-86.
- , J.W. Nietfeldt, and J.J. Krupa. 1979. An experimental analysis of the role of the tail in attaining high running speed in *Cnemidophorus sexlineatus* (Reptilia: Squamata: Lacertilia). *Herpetologica* 35:114-116.
- Barbour, R.W. 1971. Amphibians and Reptiles of Kentucky. Univ. Kentucky Press, Lexington.
- Barden, A. 1942. Activity of the lizard, *Cnemidophorus sexlineatus*. *Ecology* 23:336-344.
- Baxter, G.T. and M.D. Stone. 1985. Amphibians and reptiles of Wyoming. 2nd ed. Wyoming Game and Fish Dept., Laramie.
- Behler, J.L. and F.W. King. 1979. The Audubon Society field guide to North American reptiles and amphibians. Alfred A. Knopf, New York.
- Bellis, E.D. 1964. A summer Six-lined Racerunner (*Cnemidophorus sexlineatus*) population in South Carolina. *Herpetologica* 20:9-16.
- Bickham, J.W., C.O. McKinney, and M.F. Mathews. 1976. Karyotypes of the parthenogenetic whiptail lizard *Cnemidophorus laredoensis* and its presumed parental species (Sauria: Teiidae). *Herpetologica* 32:395-399.
- Blanchard, F.N. 1922. The amphibians and reptiles of western Tennessee. *Occ. Pap. Mus. Zool. Univ. Michigan* (117):1-18.
- Blaney, R.M. 1971. An annotated check list and biogeographic analysis of the insular herpetofauna of the Apalachicola region, Florida. *Herpetologica* 27:406-430.
- Bocourt, M.-F. 1874. *In* A. Duméril, M.-F. Bocourt, and F. Mocquard, Études sur les reptiles. *In* Recherches zoologiques pour servir à l'histoire de la faune de l'Amérique Centrale et du Mexique. Mission Scientifique Mexique et dans l'Amérique Centrale, recherches Zool., Pt. 3, Sect. 1. Imprimerie au Nat., Paris.
- Bohlen, C.H. 1976. Coexistence and competition in three sympatric Kansas lizard species. Ph.D. Diss., Kansas St. Univ., Manhattan.
- Böhme, W. 1988. Zur Genitalmorphologie der Sauria: funktionelle und stammesgeschichtliche Aspekte. *Bonner Zool. Monogr.* (27):1-176.
- Bonnaterre, P.J. 1789. Erpetologie. *In* Tableau encyclopédique et méthodique des trois règnes de la nature. Panckoucke, Paris.
- Boulenger, G.A. 1885. Catalogue of the lizards in the British Museum (Natural History). 2nd ed. Vol. II. Board of Trustees, British Mus., London.
- Boyd, C.E. and C.P. Goodyear. 1971. The protein content of some common reptiles and amphibians. *Herpetologica* 27:317-320.
- Brackin, M.F. 1978. The relation of rank to physiological state in *Cnemidophorus sexlineatus* dominance hierarchies. *Herpetologica* 34:185-191.
- 1979. The seasonal reproductive, fat body, and adrenal cycles of male Six-lined Racerunners (*Cnemidophorus sexlineatus*) in central Oklahoma. *Herpetologica* 35:216-222.
- Brattstrom, B.H. 1965. Body temperatures of reptiles. *Amer. Midl. Nat.* 73:376-422.
- Brooks, D.R. and M.A. Mayes. 1976. Morphological variation in natural infections of *Occhoristica bivittellobata* Loewen, 1940 (Cestoidea: Anoplocephalidae). *Trans. Nebraska Acad. Sci.* 3:20-21.
- Brown, A.E. 1903. Texas reptiles and their faunal relations. *Proc. Acad. Nat. Sci. Philadelphia* 55:543-558.
- Brown, E.E. 1956. Nests and young of the Six-lined Racerunner *Cnemidophorus sexlineatus* Linnaeus. *J. Elisha Mitchell Sci. Soc.* 72:30-40.
- Burger, W.L. 1950. New, revived, and reallocated names for North American whiptailed lizards, genus *Cnemidophorus*. *Nat. Hist. Misc. Chicago Acad. Sci.* (65):1-9.
- Burt, C.E. 1927. An annotated list of the amphibians and reptiles of Riley County, Kansas. *Occ. Pap. Mus. Zool. Univ. Michigan* (189):1-9.
- 1928. Insect food of Kansas lizards with notes on feeding habits. *J. Kansas Entomol. Soc.* 1:50-68.
- 1931a. A study of the teiid lizards of the genus *Cnemidophorus* with special reference to their phylogenetic relationships. *Bull. U.S. Natl. Mus.* (154):viii + 286 p.
- 1931b. The status of the Spotted Race-runner, *Cnemidophorus sexlineatus gularis* (Baird and Girard). *Proc. Biol. Soc. Washington* 44:73-78.
- 1935. Further records of the ecology and distribution of amphibians and reptiles in the middle west. *Amer. Midl. Nat.* 16:311-336.
- Busby, W.H., J.T. Collins, and J.R. Parmelee. 1996. The reptiles and amphibians of Fort Riley and vicinity. *Kansas Biol. Surv., Lawrence.*
- and J.R. Parmelee. 1996. Historical changes in a herpetofaunal

- assemblage in the Flint Hills of Kansas. *Amer. Midl. Nat.* 135:81-91.
- Cagle, F.R. 1942. Herpetological fauna of Jackson and Union counties, Illinois. *Amer. Midl. Nat.* 28:164-200.
- Camper, J.D. 1986. Life history notes: *Ambystoma tigrinum tigrinum* (Eastern Tiger Salamander). *Feeding. Herpetol. Rev.* 17:19.
- Carpenter, C.C. 1959. A population of the Six-lined Racerunner (*Cnemidophorus sexlineatus*). *Herpetologica* 15:81-86.
- . 1960a. Reproduction in Oklahoma *Sceloporus* and *Cnemidophorus*. *Herpetologica* 16:175-182.
- . 1960b. Aggressive behaviour and social dominance in the Six-lined Racerunner (*Cnemidophorus sexlineatus*). *Anim. Behav.* 8:61-66.
- . 1962. Patterns of behavior in two Oklahoma lizards. *Amer. Midl. Nat.* 67:132-151.
- and J.J. Krupa. 1989. Oklahoma herpetology: an annotated bibliography. Univ. Oklahoma Press, Norman.
- Clark, D.R., Jr. 1976. Ecological observations on a Texas population of Six-lined Racerunners, *Cnemidophorus sexlineatus* (Reptilia, Lacertilia, Teiidae). *J. Herpetol.* 10:133-138.
- , E.L. Flickinger, D.H. White, R.L. Hothem, and A.A. Belisle. 1995. Dicolol and DDT residues in lizard carcasses and bird eggs from Texas, Florida, and California. *Bull. Environ. Contam. Toxicol.* 54:817-824.
- Clarke, R.F. 1958. An ecological study of reptiles and amphibians in Osage County, Kansas. *Emporia St. Res. Stud.* 7:1-52.
- . 1965. Lizards in Kansas. *Kansas School Nat.* 11:1-16.
- Cochran, D.M. and C.J. Goin. 1970. The new field book of reptiles and amphibians. G. P. Putnam's Sons, New York.
- Cole, C.J. 1984. Unisexual lizards. *Sci. Amer.* 250:94-100.
- , H.C. Dessauer, and G.F. Barrowclough. 1988. Hybrid origin of a unisexual species of whiptail lizard, *Cnemidophorus neomexicanus*, in western North America: new evidence and a review. *Amer. Mus. Novit.* (2905):1-38.
- Collins, J.T. 1974. Amphibians and reptiles in Kansas. *Univ. Kansas Mus. Nat. Hist. Publ. Educ. Ser.* (1):ix + 283 p.
- . 1982. Amphibians and reptiles in Kansas. 2nd ed. *Univ. Kansas Mus. Nat. Hist. Publ. Educ. Ser.* (8):1-356.
- . 1993. Amphibians and reptiles in Kansas. 3rd ed., rev. *Univ. Kansas Mus. Nat. Hist. Publ. Educ. Ser.* (13):xx + 397 p.
- and S.L. Collins. 1991. Reptiles and amphibians of the Cimar-ron National Grasslands, Morton County, Kansas. *U.S. For. Ser. U.S. Dept. Agri., Elkhart, Kansas.*
- and —. 1993. Reptiles and amphibians of Cheyenne Bot-toms. *Hearth Publ., Hillsboro, Kansas.*
- Conant, R. 1958. A field guide to reptiles and amphibians of the United States and Canada east of the 100th meridian. 1st ed. Houghton Mifflin Co., Boston, Massachusetts.
- . 1975. A field guide to reptiles and amphibians of eastern and central North America. 2nd ed. Houghton Mifflin Co., Boston, Massachusetts.
- and J.T. Collins. 1991. A field guide to reptiles and amphibians of eastern and central North America. 3rd ed. Houghton Mifflin Co., Boston, Massachusetts.
- Cope, E.D. 1866 (1867). On the Reptilia and Batrachia of the Sonoran province of the Nearctic region. *Proc. Acad. Nat. Sci. Philadelphia* 18:300-314.
- . 1875. Check-list of North American Batrachia and Reptilia; with a systematic list of the higher groups, and an essay on geographical distribution. Based on the specimens contained in the U.S. National Museum. *Bull. U.S. Natl. Mus.* (1):1-104 p.
- . 1883. Notes on the geographical distribution of Batrachia and Reptilia in western North America. *Proc. Acad. Nat. Sci. Philadelphia* 35:10-35.
- . 1892. A synopsis of the species of the teiid genus *Cnemidophorus*. *Trans. Amer. Philos. Soc.* 17:27-52.
- . 1893 (1894). On the Batrachia and Reptilia of the plains at latitude 36°30'. *Proc. Acad. Nat. Sci. Philadelphia* 45:386-387.
- . 1898 (1900). The crocodylians, lizards, and snakes of North America. *Ann. Rept. U.S. Natl. Mus.* 1898:153-1270.
- Coues, E. 1875. Synopsis of the reptiles and batrachians of Arizona, with critical and field notes, and an extensive synonymy, p. 585-633. *In* G.M. Wheeler, Report upon geographical and geological explorations and surveys west of the one hundredth meridian. Vol. V, Zoology. Engineer Dept., U.S. Army, Washington, D.C.
- Cuvier, G.L.C.F.D. 1831. The Animal Kingdom arranged in conformity with its organization, by the Baron Cuvier. Translated from the French, with notes and additions, by H.M. Murtrie, M.D. Vol. II. G. & C. & H. Carvill, New York.
- Davis, L.C. 1973. The herpetofauna of Peccary Cave, Arkansas. M.S. Thesis, Univ. Arkansas, Fayetteville.
- Dearing, M.D. 1993. An alimentary specialization for herbivory in the tropical whiptail lizard, *Cnemidophorus murinus*. *J. Herpetol.* 27:111-114.
- Degenhardt, W.G., C.W. Painter, and A.H. Price. 1996. The Amphibians and Reptiles of New Mexico. Univ. New Mexico Press, Albuquerque.
- Dellinger, S.C. and J.D. Black. 1938. Herpetology of Arkansas. Part one. The reptiles. *Occ. Pap. Univ. Arkansas Mus.* (1):1-47.
- Densmore, L.D., III, C.C. Moritz, J.W. Wright, and W.M. Brown. 1989a. Mitochondrial-DNA analyses and the origin and relative age of parthenogenetic lizards (genus *Cnemidophorus*). IV. Nine *sexlineatus*-group unisexuals. *Evolution* 43:969-983.
- , J.W. Wright, and W.M. Brown. 1989b. Mitochondrial-DNA analyses and the origin and relative age of parthenogenetic lizards (genus *Cnemidophorus*). II. *C. neomexicanus* and the *C. tessellatus* complex. *Evolution* 43:943-957.
- Dessauer, H.C. and C.J. Cole. 1984. Influence of gene dosage on electrophoretic phenotypes of proteins from lizards of the genus *Cnemidophorus*. *Comp. Biochem. Physiol.* 77B: 181-189.
- and —. 1989. Diversity between and within nominal forms of unisexual teiid lizards, p. 49-71. *In* R.M. Dawley and J.P. Bogart (eds.), *Evolution and ecology of unisexual vertebrates.* *Bull. New York State Mus.* (466), Albany.
- , W. Fox, and Q.L. Hartwig. 1962. Comparative study of trans-ferrins of Amphibia and Reptilia using starch-gel electrophoresis and autoradiography. *Comp. Biochem. Physiol.* 5:17-29.
- Dillon, L.S. and R.J. Baldauf. 1945. Unusual behavior of *Cnemidophorus sexlineatus*. *Copeia* 1945:174.
- Dixon, J.R. 1987. Amphibians and reptiles of Texas with keys, taxonomic synopses, bibliography, and distribution maps. Texas A&M Univ. Press, College Station.
- . 1993. Supplement to the literature for the "Amphibians and Reptiles of Texas" 1987. *Smithson. Herpetol. Info. Serv.* (94):1-43.
- Dodd, C.K., Jr. 1992a. Biological diversity of a temporary pond herpetofauna in north Florida sandhills. *Biodiv. Conserv.* 1:125-142.
- . 1992b. Fluorescent powder is only partially successful in tracking movements of the Six-lined Racerunner (*Cnemidophorus sexlineatus*). *Florida Field Nat.* 20:8-14.
- . 1993. The effects of toeclipping on sprint performance of the lizard *Cnemidophorus sexlineatus*. *J. Herpetol.* 27:209-213.

- Dollahon, N.R. and J. Janovy, Jr. 1971. Insect flagellates from feces and gut contents of four genera of lizards. *J. Parasitol.* 57:1130-1132.
- Dowling, H.G. 1957. A review of the amphibians and reptiles of Arkansas. *Occ. Pap. Univ. Arkansas Mus.* (3):1-51.
- Duellman, W.E. and R.G. Zweifel. 1962. A synopsis of the lizards of the *sexlineatus* group (genus *Cnemidophorus*). *Bull. Amer. Mus. Nat. Hist.* 123:155-210.
- Duméril, A.M.C. and G. Bibron. 1839. *Erpétologie générale ou histoire naturelle complète des reptiles*, vol. 8. Roret, Paris.
- Dundee, H.A. and D.A. Rossman. 1989. *The amphibians and reptiles of Louisiana*. Louisiana St. Univ. Press, Baton Rouge.
- Durtsche, R.D. 1996. A capture technique for small, smooth-scaled lizards. *Herpetol. Rev.* 27:12-13.
- Dyer, W.G. 1971. Some helminths of the Six-lined lizard, *Cnemidophorus sexlineatus*, in South Dakota. *Proc. Helminthol. Soc. Wash.* 38:256.
- Edgren, R.A. 1955. Possible thermo-regulatory burrowing in the lizard *Cnemidophorus sexlineatus*. *Nat. Hist. Misc. Chicago Acad. Sci.* (141):1-2.
- Enge, K.N. and C.K. Dodd, Jr. 1986. A bibliography of the herpetofauna of Florida. *Smithson. Herpetol. Info. Serv.* (72):1-68.
- Engels, W.L. 1942. Vertebrate fauna of North Carolina coastal islands, a study in the dynamics of animal distribution I. Ocracoke Island. *Amer. Midl. Nat.* 28:273-304.
- . 1952. Vertebrate fauna of North Carolina coastal islands II. Shackleford Banks. *Amer. Midl. Nat.* 47:702-742.
- Etheridge, K. and L.C. Wit. 1982. Life history notes: *Cnemidophorus sexlineatus* (Six-lined Racerunner). *Cannibalism. Herpetol. Rev.* 13:19.
- and —. 1993. Factors affecting activity in *Cnemidophorus*, p. 151-162. *In* J.W. Wright and L.J. Vitt (eds.), *Biology of whiptail lizards (genus Cnemidophorus)*. Oklahoma Mus. Nat. Hist., Norman.
- , —, and J.C. Sellers. 1983. Hibernation in the lizard *Cnemidophorus sexlineatus* (Lacertilia: Teiidae). *Copeia* 1983: 206-214.
- , —, —, and S.E. Trauth. 1986. Seasonal changes in reproductive condition and energy stores in *Cnemidophorus sexlineatus*. *J. Herpetol.* 20:554-559.
- Etheridge, R. 1958. Pleistocene lizards of the Cragin Quarry fauna of Meade County, Kansas. *Copeia* 1958:94-101.
- . 1960. Additional notes on the lizards of the Cragin Quarry fauna. *Pap. Michigan Acad. Sci. Arts Lett.* 45:113-117.
- Farner, D.S. and E.A. Seaman. 1946. New host records for the trombiculid mite, *Acariscus masoni* Ewing. *J. Parasitol.* 32:93.
- Fitch, H.S. 1956. Temperature responses in free-living amphibians and reptiles of northeastern Kansas. *Univ. Kansas Publ. Mus. Nat. Hist.* 8:417-476.
- . 1958. Natural history of the Six-lined Racerunner (*Cnemidophorus sexlineatus*). *Univ. Kansas Publ. Mus. Nat. Hist.* 11:11-62.
- . 1970. Reproductive cycles in lizards and snakes. *Misc. Publ. Univ. Kansas Mus. Nat. Hist.* (52):1-247.
- . 1981. Sexual size differences in reptiles. *Misc. Publ. Mus. Nat. Hist. Univ. Kansas* (70):1-72.
- . 1985. Variation in clutch and litter size in New World reptiles. *Misc. Publ. Univ. Kansas Mus. Nat. Hist.* (76):1-76.
- Fitzinger, L. 1843. *Systema Reptilium. Fasciculum Primus. Amblyglossae. Vindobonae, Braumüller et Seidel, Vindobonae* (Vienna).
- Fouquette, M.J., Jr. and H.L. Lindsay, Jr. 1955. An ecological survey of reptiles in parts of northwestern Texas. *Texas J. Sci.* 7:402-421.
- Franz, R. 1995. An introduction to the amphibians and reptiles of the Katherine Ordway Preserve-Swisher Memorial Sanctuary, Putnam County, Florida. *Bull. Florida Mus. Nat. Hist.* 38:1-10.
- Funderburg, J.B. and D.S. Lee. 1968. The amphibian and reptile fauna of pocket gopher (*Geomys*) mounds in central Florida. *J. Herpetol.* 1:99-100.
- Gadow, H. 1903. Evolution of the colour-pattern and orthogenetic variation in certain Mexican species of lizards, with adaptations to their surroundings. *Proc. R. Soc. Lond.* 72: 109-125.
- . 1906. A contribution to the study of evolution based upon the Mexican species of *Cnemidophorus*. *Proc. Zool. Soc. London* 1906:277-375.
- Garrett, J.M. and D.G. Barker. 1987. *A field guide to reptiles and amphibians of Texas*. Texas Monthly Press, Inc., Austin.
- Gove, D. 1979. A comparative study of snake and lizard tongue-flicking, with an evolutionary hypothesis. *Z. Tierpsychol.* 51:58-76.
- Grassman, M. and D.L. Hess. 1992a. Sex differences in adrenal function in the lizard *Cnemidophorus sexlineatus*: I. Seasonal variation in the field. *J. Exp. Zool.* 264:177-182.
- and —. 1992b. Sex differences in adrenal function in the lizard *Cnemidophorus sexlineatus*: II. Responses to acute stress in the laboratory. *J. Exp. Zool.* 264:183-188.
- Greenberg, C.H., D.G. Neary, and L.D. Harris. 1994. Effect of high-intensity wildfire and silvicultural treatments on reptile communities in sand-pine scrub. *Conserv. Biol.* 8:1047-1057.
- Guillette, L.J., Jr., G.R. Masson, and V. DeMarco. 1991. Effects of prostaglandin F₂alpha, prostaglandin E₂, and arachidonic acid on the induction of oviposition in vivo and in vitro in oviparous lizards. *Prostaglandins* 42:533-540.
- Günther, A.C.L.G. 1885. *Reptilia and Batrachia*, Pt. 40, p. 25-32. *In* F.D. Godman and O. Salvin, *Biologia Centrali-Americana*. Dulau and Co., London.
- Gut, H.J. and C.E. Ray. 1963. The Pleistocene vertebrate fauna of Reddick, Florida. *Quart. J. Florida Acad. Sci.* 26:315-328.
- Guttman, S.I. 1971. An electrophoretic analysis of the hemoglobins of Old and New World lizards. *J. Herpetol.* 5:11-16.
- Hamilton, W.J., Jr. and J.A. Pollack. 1961. The food of some lizards from Fort Benning, Georgia. *Herpetologica* 17:99-106.
- Hammerson, G.A. 1982. *Amphibians and reptiles in Colorado*. Colorado Div. Wildl., Denver.
- Hardy, D.F. 1962. Ecology and behavior of the Six-lined Racerunner, *Cnemidophorus sexlineatus*. *Univ. Kansas Sci. Bull.* 43:1-73.
- Hardy, L.M. and C.J. Cole. 1981. Parthenogenetic reproduction in lizards: histological evidence. *J. Morphol.* 170:215-237.
- Harney, L. 1953. Notes on the food habits of three common lizards of southern Oklahoma. *Proc. Oklahoma Acad. Sci.* 34:85-86.
- Harwood, P.D. 1932. The helminths parasitic in the Amphibia and Reptilia of Houston, Texas, and vicinity. *Proc. U.S. Natl. Mus.* 81:1-71.
- Hatch, K.A. and J.D. Stein. 1994. Natural history notes: *Cnemidophorus sexlineatus* (Six-lined Racerunner). *Oophagy. Herpetol. Rev.* 25:65.
- Hoddenbach, G.A. 1966. Reproduction in western Texas *Cnemidophorus sexlineatus* (Sauria: Teiidae). *Copeia* 1966:110-113.
- Hoffman, R.L. 1944. Notes on *Cnemidophorus sexlineatus* in Virginia. *Proc. Biol. Soc. Washington* 57:124-125.

- , 1949. A geographic variation gradient in *Cnemidophorus*. *Herpetologica* 5:149.
- , 1957a. A new subspecies of the teiid lizard *Cnemidophorus sexlineatus* (Linnaeus) from eastern United States. *J. Washington Acad. Sci.* 47:153-156.
- , 1957b. A new name for the race-runner lizard of the middle Atlantic states (Tejidae). *J. Washington Acad. Sci.* 47:423.
- Holman, J.A. 1966. The Pleistocene herpetofauna of Miller's Cave, Texas. *Texas J. Sci.* 18:372-377.
- , 1969. The Pleistocene amphibians and reptiles of Texas. *Publ. Mus. Michigan St. Univ. Biol. Ser.* 4:161-192.
- , 1971. Herpetofauna of the Sandahl local fauna (Pleistocene: Illinoian) of Kansas. *Contr. Mus. Paleontol. Univ. Michigan* 23:349-355.
- , 1974. A late Pleistocene herpetofauna from southwestern Missouri. *J. Herpetol.* 8:343-346.
- , 1979. Herpetofauna of the Nash local fauna (Pleistocene: Aftonian) of Kansas. *Copeia* 1979:747-749.
- Hudson, G.E. 1972. The amphibians and reptiles of Nebraska. *Nebraska Conserv. Bull.* (24):1-146.
- Hughes, R.C., J.R. Baker, and C.B. Dawson. 1941. The tape-worms of reptiles. Part I. *Amer. Midl. Nat.* 25:454-468.
- Hurter, J. 1893. Catalogue of reptiles and batrachians found in the vicinity of St. Louis, Mo. *Trans. Acad. Sci. St. Louis* 6: 251-261.
- Jackson, C.G., Jr. and M.M. Jackson. 1970 (1971). Herpetofauna of Dauphin Island, Alabama. *Quart. J. Florida Acad. Sci.* 33:281-287.
- Johnson, L.F. and J.S. Jacob. 1984. Pituitary activity and reproductive cycle of male *Cnemidophorus sexlineatus* in west Tennessee. *J. Herpetol.* 18:396-405.
- Johnson, T.R. 1987. The amphibians and reptiles of Missouri. Missouri Dept. Conserv., Jefferson City.
- Lee, D.S. 1968. Herpetofauna associated with central Florida mammals. *Herpetologica* 24:83-84.
- Leuck, B.E. 1980. Life with and without sex: comparative behavior of three species of whiptail lizards (*Cnemidophorus*: Teiidae). Ph.D. Diss., Univ. Oklahoma, Norman.
- , 1982. Comparative burrow use and activity patterns of parthenogenetic and bisexual whiptail lizards (*Cnemidophorus*: Teiidae). *Copeia* 1982:416-424.
- , 1985. Comparative social behavior of bisexual and unisexual whiptail lizards (*Cnemidophorus*). *J. Herpetol.* 19:492-506.
- Leviton, A.E. 1972. Reptiles and amphibians of North America. Doubleday & Company, Inc., New York.
- Lewis, T.H. 1946. Reptiles and amphibians of Smith Island, N.C. *Amer. Midl. Nat.* 36:682-684.
- Linnaeus, C. 1766. *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species cum characteribus, differentiis, synonymis, locis.* 12th ed. Vol. 1. L. Salvius, Stockholm.
- Lips, K.R. 1991. Vertebrates associated with tortoise (*Gopherus polyphemus*) burrows in four habitats in south-central Florida. *J. Herpetol.* 25:477-481.
- Lohoefer, R. and R. Altig. 1983. Mississippi herpetology. Mississippi State Univ. Res. Cent. Bull. (1):vi + 66 p.
- Loomis, R.B. 1956. The chigger mites of Kansas (Acarina, Trombiculidae). *Univ. Kansas Sci. Bull.* 37:1195-1443.
- and D.A. Crossley, Jr. 1963. New species and new records of chiggers (Acarina: Trombiculidae) from Texas. *Acarologia* 5:371-383.
- Lowe, C. H., Jr. 1955. The occurrence of the lizard *Cnemidophorus sexlineatus* in New Mexico. *Copeia* 1955:61-62.
- , 1966. The Prairie lined Racerunner. *J. Arizona Acad. Sci.* 4:44-45.
- , 1993. Introduction to the biology of whiptail lizards (genus *Cnemidophorus*), p. 1-25. In J.W. Wright and L.J. Vitt (eds.), *Biology of whiptail lizards (genus Cnemidophorus)*. Oklahoma Mus. Nat. Hist., Norman.
- and S.R. Goldberg. 1966. Variation in the circumtesticular Leydig cell tunic of teiid lizards (*Cnemidophorus* and *Ameiva*). *J. Morphol.* 119:277-281.
- and J.W. Wright. 1966. Chromosomes and karyotypes of cnemidophorine teiid lizards. *Mamm. Chromosomes Newsl.* 22:199-200.
- , —, C.J. Cole, and R.L. Bezy. 1970. Chromosomes and evolution of the species groups of *Cnemidophorus* (Reptilia: Teiidae). *Syst. Zool.* 19:128-141.
- , —, and K.S. Norris. 1966. Analysis of the herpetofauna of Baja California, Mexico: IV. The Baja California Striped Whiptail, *Cnemidophorus labialis*, with key to the striped-unspotted whiptails of the Southwest. *J. Arizona Acad. Sci.* 4:121-127.
- and R.G. Zweifel. 1952. A new species of whiptailed lizard (genus *Cnemidophorus*) from New Mexico. *Bull. Chicago Acad. Sci.* 9:229-247.
- Lynch, J.D. 1985. Annotated checklist of the amphibians and reptiles of Nebraska. *Trans. Nebraska Acad. Sci.* 13:33-57.
- Lynn, W.G., A.M. Fitzpatrick, S.S.N.D., and M. Kelly, O.S.P. 1966. Thyroid morphology in lizards of the families Lacertidae and Teiidae. *Herpetologica* 22:71-75.
- Mahler, W.F. 1981. Field studies on Texas endemics. *Sida* 9:176-181.
- Martin, R.A. 1974. Fossil vertebrates from the Haile XIVA fauna, Alachua County, p. 100-113. In S.D. Webb (ed.), *Pleistocene mammals of Florida*. Univ. Florida Press, Gainesville.
- Martof, B.S. 1963. Some observations on the herpetofauna of Sapelo Island, Georgia. *Herpetologica* 19:70-72.
- , W.M. Palmer, J.R. Bailey, and J.R. Harrison, III. 1980. Amphibians and reptiles of the Carolinas and Virginia. Univ. North Carolina Press, Chapel Hill.
- Maslin, T.P. 1967. Skin grafting in the bisexual teiid lizard *Cnemidophorus sexlineatus* and in the unisexual *C. tessellatus*. *J. Exp. Zool.* 166:137-150.
- and D.M. Secoy. 1986. A checklist of the lizard genus *Cnemidophorus* (Teiidae). *Contrib. Zool. Univ. Colorado Mus.* (1):1-60.
- McAllister, C.T., S.E. Trauth, and D.B. Conn. 1991a. Helminth parasites of unisexual and bisexual whiptail lizards (Teiidae) in North America. VII. The Six-lined Racerunner, *Cnemidophorus sexlineatus*. *Texas J. Sci.* 43:391-397.
- , S.J. Upton, and S.E. Trauth. 1991b. A new species of coccidian (Apicomplexa: Eimeriidae) from the Prairie Racerunner, *Cnemidophorus sexlineatus viridis* (Sauria: Teiidae), in Arkansas. *J. Parasitol.* 77:910-913.
- McCauley, R.H., Jr. 1939. Notes on the food habits of certain Maryland lizards. *Amer. Midl. Nat.* 22:150-153.
- McKenna, T.M. and G.C. Packard. 1975. Rates of heat exchange in the lizards *Cnemidophorus sexlineatus* and *Sceloporus undulatus*. *Copeia* 1975:162-169.
- McKinney, C.O., F.R. Kay, and R.A. Anderson. 1973. A new all-female species of the genus *Cnemidophorus*. *Herpetologica* 29:361-366.
- McLain, R.B. 1899. Notes on a collection of reptiles made by Mr. C.J. Pierson at Fort Smith, Arkansas, with remarks on other eastern reptiles. *Contrib. N. Amer. Herpetol.*, priv. printed, Wheeling, West Virginia, 5 pp.
- Means, D.B. and H.W. Campbell. 1981. Effects of prescribed burning on amphibians and reptiles, p. 89-97. In G.W. Wood (ed.), *Prescribed fire and wildlife in southern forests*. Bell W. Baruch For. Sci. Inst., Georgetown, South Carolina.
- Merrem, B. 1820. *Versuch eines Systems der Amphibien*. Johann Christian Krieger, Marburg.

- Minton, S.A., Jr. 1972. Amphibians and reptiles of Indiana. Indiana Acad. Sci. Monogr. (3):v + 346 p.
- and J.E. Minton. 1948. Notes on a herpetological collection from the middle Mississippi Valley. Amer. Midl. Nat. 40: 378-390.
- Mitchell, J.C. 1994. The reptiles of Virginia. Smithson. Inst. Press, Washington, D.C.
- Moritz, C., J.W. Wright, and W.M. Brown. 1992. Mitochondrial DNA analyses and the origin and relative age of parthenogenetic *Cnemidophorus*: phylogenetic constraints on hybrid origins. Evolution 46:184-192.
- Moskowitz, N. 1951. Observations on some intestinal flagellates from reptilian host (Squamata). J. Morphol. 89:257-321.
- Mount, R.H. 1975. The reptiles and amphibians of Alabama. Agri. Exp. Sta., Auburn Univ., Alabama.
- , S.E. Trauth, and W.H. Mason. 1981. Predation by the imported fire ant, *Solenopsis invicta* (Hymenoptera: Formicidae), on the eggs of the lizard *Cnemidophorus sexlineatus* (Squamata: Teiidae). J. Alabama Acad. Sci. 52:66-70.
- Mullen, G.R., S.E. Trauth, and J.C. Sellers. 1984. Association of a miltogrammine fly, *Eumacronychia nigricornis* Allen (Diptera: Sarcophagidae), with the brood burrows of *Sceloporus undulatus* (Latrielle)(Reptilia: Lacertilia). J. Georgia Entomol. Soc. 19:1-6.
- Müller, P.L.S. 1774. Systema naturae per regna tria naturae, secundum classes, ordines, genera, species cum characteribus, differentiis, synonymis, locis. 12th ed. Vol. 3. German translation.
- Munyer, E.A. and P.W. Parmalee. 1967. Additional herpetological records from Sangamon, Macoupin and Menard counties, Illinois. Trans. Illinois St. Acad. Sci. 60:200-202.
- Mushinsky, H.R. 1985. Fire and the Florida sandhill herpetofaunal community: with special attention to responses of *Cnemidophorus sexlineatus*. Herpetologica 41:333-342.
- Neaves, W.B. 1969. Adenosine deaminase phenotypes among sexual and parthenogenetic lizards in the genus *Cnemidophorus* (Teiidae). J. Exp. Zool. 171:175-184.
- Newton, W.D. and S.E. Trauth. 1992. Ultrastructure of the spermatozoon of the lizard *Cnemidophorus sexlineatus* (Sauria: Teiidae). Herpetologica 48:330-343.
- Noble, G.K. and H.T. Bradley. 1933. The mating behavior of lizards; its bearing on the theory of sexual selection. Ann. New York Acad. Sci. 35:25-100.
- Oldfield, B. and J.J. Moriarty. 1994. Amphibians and reptiles native to Minnesota. Univ. Minnesota Press, Minneapolis.
- Ortenburger, A.I. and B. Freeman. 1930. Notes on some reptiles and amphibians from western Oklahoma. Publ. Univ. Oklahoma Biol. Surv. 2:175-188.
- Palmer, W.M. and A.L. Braswell. 1995. Reptiles of North Carolina. Univ. North Carolina Press, Chapel Hill.
- Parker, E.D., Jr. 1979. Phenotypic consequences of parthenogenesis in *Cnemidophorus* lizards. II. Similarity of *C. tessellatus* to its sexual parental species. Evolution 33:1167-1179.
- and R.K. Selander. 1976. The organization of genetic diversity in the parthenogenetic lizard *Cnemidophorus tessellatus*. Genetics 84:791-805.
- Paulissen, M.A. 1986. A technique for marking teiid lizards in the field. Herpetol. Rev. 17:16-17.
- . 1987a. Diet of adult and juvenile Six-lined Racerrunners, *Cnemidophorus sexlineatus* (Sauria: Teiidae). Southwest. Nat. 32:395-397.
- . 1987b. Optimal foraging and intraspecific diet differences in the lizard *Cnemidophorus sexlineatus*. Oecologia 71: 439-446.
- . 1988a. Ontogenetic comparison of body temperature selection and thermal tolerance of *Cnemidophorus sexlineatus*. J. Herpetol. 22:473-476.
- . 1988b. Ontogenetic and seasonal comparisons of daily activity patterns of the Six-lined Racerrunner, *Cnemidophorus sexlineatus* (Sauria: Teiidae). Amer. Midl. Nat. 120:355-361.
- . 1988c. Ontogenetic and seasonal shifts in microhabitat use by the lizard *Cnemidophorus sexlineatus*. Copeia 1988: 1021-1029.
- and B.C. Harvey. 1985. *Cnemidophorus sexlineatus viridis* (Prairie-lined Racerrunner). Arboreality. Herpetol. Rev. 16: 27.
- , J.M. Walker, and J.E. Cordes. 1992. Can parthenogenetic *Cnemidophorus laredoensis* (Teiidae) coexist with its bisexual congeners? J. Herpetol. 26:153-158.
- Pearson, P.G. and G.E. Nelson, Jr. 1952. Some commensal relations of the lizard *Cnemidophorus sexlineatus* (Linné). Copeia 1952:188-189.
- Pietruszka, R.D. 1981. Use of scutellation for distinguishing sexes in bisexual species of *Cnemidophorus*. Herpetologica 37:244-249.
- Pough, F.H. 1973. Lizard energetics and diet. Ecology 54:837-844.
- , J.B. Heiser, and W.N. McFarland. 1989. Vertebrate life. 3rd ed. Macmillan Publ. Co., New York.
- Presch, W. 1974. A survey of the dentition of the macroteiid lizards (Teiidae: Lacertilia). Herpetologica 30:344-349.
- Price, A.H. 1983. An annotated bibliography of the genus *Cnemidophorus* in New Mexico. Smithson. Herpetol. Info. Serv. (58):1-92.
- Pritchett, A.H. 1903. Some experiments in feeding lizards with protectively colored insects. Biol. Bull. 5:271-287.
- Punzo, F. 1990. Feeding ecology of the Six-lined Racerrunner (*Cnemidophorus sexlineatus*) in southern Florida. Herpetol. Rev. 21:33-35.
- Ragland, I.M., L.C. Wit, and J.C. Sellers. 1981. Temperature acclimation in the lizards *Cnemidophorus sexlineatus* and *Anolis carolinensis*. Comp. Biochem. Physiol. 70A:33-36.
- Richmond, N.D. and C.J. Goin. 1938. Notes on a collection of amphibians and reptiles from New Kent County, Virginia. Ann. Carnegie Mus. 27:301-310.
- Rickart, E.A. 1976. A new horned lizard (*Phrynosoma adinognathus*) from the early Pleistocene of Meade County, Kansas, with comments on the herpetofauna of the Borchers locality. Herpetologica 32:64-67.
- Rogers, K.L. 1976. Herpetofauna of the Beck Ranch local fauna (upper Pliocene: Blancan) of Texas. Publ. Mus. Michigan St. Univ. Paleon. Ser. 1:163-200.
- Rudolph, D.C. and J.G. Dickson. 1990. Streamside zone width and amphibian and reptile abundance. Southwest. Nat. 35: 472-476.
- Savage, T. 1967. The diet of rattlesnakes and copperheads in the Great Smoky Mountains National Park. Copeia 1967: 226-227.
- Schmidt, K.P. and T.F. Smith. 1944. Amphibians and reptiles of the Big Bend region of Texas. Zool. Ser. Field Mus. Nat. Hist. 29:75-96.
- Schwardt, H.H. 1938. Reptiles of Arkansas. Bull. Arkansas Agri. Exp. Sta. (357):1-47.
- Sehe, C.T. 1965. Comparative studies on the ultimobranchial body in reptiles and birds. Gen. Comp. Endocrinol. 5:45-59.
- Sellers, J.C., S.E. Trauth, and L.C. Wit. 1980. A method of caudal blood collection in lizards. J. Herpetol. 14:185-187.
- , L.C. Wit, V. K. Ganjam, K.A. Etheridge, and I.M. Ragland. 1982. Seasonal plasma T4 titers in the hibernating lizard *Cnemidophorus sexlineatus*. Gen. Comp. Endocrinol. 46:

- 24-28.
- Shine, R. and E.L. Charnov. 1992. Patterns of survival, growth, and maturation in snakes and lizards. *Amer. Nat.* 139:1257-1269.
- Shoop, W.L. and J. Janovy, Jr. 1978. Adult cestodes from the coelomic cavity of the teid lizard, *Cnemidophorus sexlineatus*. *J. Parasitol.* 64:561-562.
- Smith, H.M. 1946. Handbook of lizards: Lizards of the United States and of Canada. Comstock Publ. Co., Inc., Ithaca, New York.
- and E.D. Brodie, Jr. 1982. A guide to field identification: reptiles of North America. Golden Press, New York.
- , T.P. Maslin, and R.L. Brown. 1965. Summary of the distribution of the herpetofauna of Colorado. *Univ. Colorado Stud. Ser. Biol.* 15:1-52.
- and E.H. Taylor. 1950a. An annotated checklist and key to the reptiles of Mexico exclusive of the snakes. *Bull. U.S. Natl. Mus.* (199):v + 253 p.
- and E.H. Taylor. 1950b. Type localities of Mexican reptiles and amphibians. *Univ. Kansas Sci. Bull.* 33:313-380.
- Smith, P.W. 1961. The amphibians and reptiles of Illinois. *Bull. Illinois Nat. Hist. Surv.* 28:1-298.
- and J.C. List. 1955. Notes on Mississippi amphibians and reptiles. *Amer. Midl. Nat.* 53:115-125.
- Snyder, D.H. 1972. Amphibians and reptiles of land between the lakes. Tennessee Valley Authority.
- Stebbins, R.C. 1985. A field guide to western reptiles and amphibians. 2nd ed. Houghton Mifflin Co., Boston, Massachusetts.
- Stille, W.T. 1947. The aquatic habits of *Cnemidophorus sexlineatus*. *Copeia* 1947:143.
- Strecker, J.K., Jr. 1902. A preliminary report on the reptiles and batrachians of McLennan County, Texas. *Trans. Texas Acad. Sci.* 4:1-7.
- 1909. Notes on the herpetology of Burnet County, Texas. *Baylor Univ. Bull.* 12:1-9.
- 1922. An annotated catalogue of the amphibians and reptiles of Bexar County, Texas. *Bull. Sci. Soc. San Antonio* (4):1-31.
- 1929. Field notes on the herpetology of Wilbarger County, Texas. *Contrib. Baylor Univ. Mus.* (19):3-9.
- 1930. A catalogue of the amphibians and reptiles of Travis County, Texas. *Contrib. Baylor Univ. Mus.* (23): 1-16.
- and W.J. Williams. 1928. Field notes on the herpetology of Bowie County, Texas. *Contrib. Baylor Univ. Mus.* (17):1-19.
- Taylor, E.H. 1935. Arkansas amphibians and reptiles in the Kansas University Museum. *Univ. Kansas Sci. Bull.* 22:207-218.
- 1936. Notes on the herpetological fauna of the Mexican state of Sinaloa. *Univ. Kansas Sci. Bull.* 24:505-537.
- 1940. Palatal sesamoid bones and palatal teeth in *Cnemidophorus*, with notes on these teeth in other saurian genera. *Proc. Biol. Soc. Washington* 53:119-124.
- Taylor, H.L., C. Currie, and J.J. Baker. 1989. The mode of origin for males collected from natural clones of parthenogenetic lizards (*Cnemidophorus*): cytological evidence. *J. Herpetol.* 23:202-205.
- Tobey, F.J. 1985. Virginia's amphibians and reptiles: a distributional survey. *Virginia Herpetol. Soc. Mr. Print, Purcellville, Virginia.*
- Tofohr, O. 1902. *Cnemidophorus sexlineatus*. *Nerthus* 4:201-204.
- Townsend, C.R. and C.J. Cole. 1985. Additional notes on requirements of captive whiptail lizards (*Cnemidophorus*), with emphasis on ultraviolet radiation. *Zoo. Biol.* 4:49-55.
- Trauth, S.E. 1974. Lizards of Arkansas. *Ozark Soc. Bull.* 8:4-5.
- 1977. Winter collection of *Cnemidophorus sexlineatus* eggs from Arkansas. *Herpetol. Rev.* 8:33.
- 1980. Geographic variation and systematics of the lizard *Cnemidophorus sexlineatus* (Linnaeus) in the United States. Ph.D. Diss., Auburn Univ., Auburn, Alabama.
- 1983. Nesting habitat and reproductive characteristics of the lizard *Cnemidophorus sexlineatus* (Lacertilia: Teiidae). *Amer. Midl. Nat.* 109:289-299.
- 1988. Eggtooth development and morphology in the Six-lined Racerunner, *Cnemidophorus sexlineatus* (Sauria: Teiidae), using scanning electron microscopy. *Proc. Arkansas Acad. Sci.* 42:84-85.
- 1992. A new subspecies of Six-lined Racerunner, *Cnemidophorus sexlineatus* (Sauria: Teiidae), from southern Texas. *Texas J. Sci.* 44:437-443.
- 1995. An emendation to the subspecies name *Cnemidophorus sexlineatus stephensi* (Sauria: Teiidae). *Bull. Chicago Herpetol. Soc.* 30:68.
- and R.A. Buchanan. 1996. Characterization of spermatozoa of the lizard *Cnemidophorus sexlineatus* (Sauria: Teiidae) using fluorescence microscopy. *J. Herpetol.*, in press.
- and W.R. Fagerberg. 1984. Ultrastructure and stereology of the eggshell in *Cnemidophorus sexlineatus* (Lacertilia: Teiidae). *Copeia* 1984:826-832.
- and —. 1993. Comparative eggshell stereology in two species of whiptail lizards (Sauria: Teiidae), p. 245-256. *In* J.W. Wright and L.J. Vitt (eds.), *Biology of whiptail lizards* (genus *Cnemidophorus*). Oklahoma Mus. Nat. Hist., Norman.
- and R.H. Mount. 1978. Excavation of hibernating *Cnemidophorus sexlineatus* (Lacertilia: Teiidae) and other lizards from Alabama and Georgia highway roadcuts. *Bull. Assoc. Southeast. Biol.* 25:74.
- , J.D. Wilhide, L.C. Hunt, A. Holt, T.L. Klotz, and S.A. Woolbright. 1996. Natural history notes: *Cnemidophorus sexlineatus*. Aquatic behavior. *Herpetol. Rev.* 27:20-21.
- Vance, T. 1978. A field key to the whiptail lizards (genus *Cnemidophorus*) Part I: The whiptails of the United States. *Bull. Maryland Herpetol. Soc.* 14:1-9.
- 1985. Annotated checklist and bibliography of Arkansas reptiles. *Smithson. Herpetol. Info. Serv.* (63):1-45.
- Vermersch, T.G. 1992. Lizards and Turtles of south-central Texas. Eakin Press, Austin, Texas.
- Vogt, R.C. 1981. Natural history of amphibians and reptiles of Wisconsin. Milwaukee Pub. Mus., Milwaukee, Wisconsin.
- Walker, J.M. 1964. Observations on the Six-lined Racerunner (*Cnemidophorus sexlineatus*) in north-central Louisiana. *Proc. Louisiana Acad. Sci.* 27:13-16.
- 1987. Distribution and habitat of the parthenogenetic whiptail lizard, *Cnemidophorus laredoensis* (Sauria: Teiidae). *Amer. Midl. Nat.* 117:319-332.
- , J.E. Cordes, and R.M. Abuhteba. 1990a. Hybridization between all-female *Cnemidophorus neomexicanus* and gonochoristic *C. sexlineatus* (Sauria: Teiidae). *Amer. Midl. Nat.* 123:404-408.
- , E.D. Parker, Jr., H.L. Taylor, J.E. Cordes, and R.M. Abuhteba. 1990b. Hybridization between all-female *Cnemidophorus tessellatus* and gonochoristic *Cnemidophorus sexlineatus*. *J. Herpetol.* 24:388-396.
- , H.L. Taylor, and J.E. Cordes. 1994. Hybrid *Cnemidophorus* (Sauria: Teiidae) in Ninemile Valley of the Purgatoire River, Colorado. *Southwest. Nat.* 39:235-240.
- Webb, R.G. 1970. Reptiles of Oklahoma. Univ. Oklahoma Press, Norman.
- Werth, R.J. 1969. Ecology of four sympatric lizards. Ph.D. Diss., Univ. Colorado, Boulder.
- 1972. Lizard ecology: evidence of competition. *Trans. Kan-*

- sas Acad. Sci. 75:283-300.
- White, T.D. and R.A. Anderson. 1994. Locomotor patterns and costs as related to body size and form in teiid lizards. *J. Zool. London* 233:107-128.
- Whiting, M.J., J.C. Godwin, and M.K. Coldren. 1991. Life history notes: *Cnemidophorus sexlineatus* (Six-lined Race-runner) and *Cophosaurus texanus* (Texas Earless Lizard). Spider predation. *Herpetol. Rev.* 22:58.
- Wiegmann, A.F.A. 1834. *Herpetologica Mexicana seu descriptio amphibiorum Novae Hispaniae. Pars prima. Saurorum species.* Luderlitz, Berlin.
- Wit, L.C. and J.C. Sellers. 1993. Thyroid activity during hibernation in *Cnemidophorus sexlineatus* (Lacertilia: Teiidae), p. 283-291. *In* J.W. Wright and L.J. Vitt (eds.), *Biology of whiptail lizards (genus Cnemidophorus)*. Oklahoma Mus. Nat. Hist., Norman.
- Witz, B.W. 1996. A new device for capturing small and medium-sized lizards by hand: the lizard grabber. *Herpetol. Rev.* 27:130-131.
- and J.M. Lawrence. 1993. Nutrient absorption efficiencies of the lizard, *Cnemidophorus sexlineatus* (Sauria: Teiidae). *Comp. Biochem. Physiol.* 105A:151-155.
- , D.S. Wilson, and M.D. Palmer. 1991. Distribution of *Gopherus polyphemus* and its vertebrate symbionts in three burrow categories. *Amer. Midl. Nat.* 126:152-158.
- Wright, J.W. 1967. A new uniparental whiptail lizard (genus *Cnemidophorus*) from Sonora, Mexico. *J. Arizona Acad. Sci.* 4:185-193.
- , 1969. Status of the name *Cnemidophorus perplexus* Baird and Girard (Teiidae). *Herpetologica* 25:67-69.
- , 1993. Evolution of the lizards of the genus *Cnemidophorus*, p. 27-81. *In* J.W. Wright and L.J. Vitt (eds.), *Biology of whiptail lizards (genus Cnemidophorus)*. Oklahoma Mus. Nat. Hist., Norman.
- , 1994. The North American deserts and species diversity in the lizards of the genus *Cnemidophorus*, p. 255-271. *In* P.R. Brown and J.W. Wright (eds.), *Herpetology of the North American Deserts: Proceedings of a Symposium. Spec. Publ. (5)*, Southwest. Herpetol. Soc., Van Nuys, California.
- , C. Spolsky, and W.M. Brown. 1983. The origin of the parthenogenetic lizard *Cnemidophorus laredoensis* inferred from mitochondrial DNA analysis. *Herpetologica* 39:410-416.
- Yarrow, H.C. 1875. Report upon the collections of batrachians and reptiles made in portions of Nevada, Utah, California, Colorado, New Mexico, and Arizona, during the years 1871, 1872, 1873, and 1874, p. 509-584. *In* G.M. Wheeler, *Report upon geographical and geological explorations and surveys west of the one hundredth meridian. Vol. V, Zoology.* Engineer Dept., U.S. Army, Washington, D.C.
- , 1882 (1883). Check list of North American Reptilia and Batrachia, with catalogue of specimens in U.S. National Museum. *Bull. U.S. Natl. Mus.* (24):v + 249 p.
- Zimmerman, R.M. and H.P. Brown. 1952. Observations on some intestinal protozoa in Oklahoma lizards, with the description of a new genus, *Biflagella*. *Proc. Oklahoma Acad. Sci.* 33:103-111.

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